UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450

# NOTICE OF ALLOWANCE AND FEE(S) DUE

21254

7590

02/11/2004

MCGINN & GIBB, PLLC 8321 OLD COURTHOUSE ROAD SUITE 200 VIENNA, VA 22182-3817 EXAMINER

WANG, GEORGE Y

ART UNIT PAPER NUMBER

2871

DATE MAILED: 02/11/2004

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/522 609	03/10/2000	Shoichi Kuroba	64317/99	4319

TITLE OF INVENTION: LIQUID CRYSTAL SIPLAY AND MANUFACTURING METHOD THEREOF

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1330	\$0	\$1330	05/11/2004

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. <u>PROSECUTION ON THE MERITS IS CLOSED</u>. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN <u>THREE MONTHS</u> FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. <u>THIS STATUTORY PERIOD CANNOT BE EXTENDED</u>. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status is changed, pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above and notify the United States Patent and Trademark Office of the change in status, or

If the SMALL ENTITY is shown as NO:

- A. Pay TOTAL FEE(S) DUE shown above, or
- B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check the box below and enclose the PUBLICATION FEE and 1/2 the ISSUE FEE shown above.
- ☐ Applicant claims SMALL ENTITY status. See 37 CFR 1.27.
- II. PART B FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.
- III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing n applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

#### PART B - FEE(S) TRANSMITTAL

Complete and send this form, t gether with applicable fee(s), to: Mail

Mail Stop ISSUE FEE Commissioner f r Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax

(703) 746-4000

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 4 should be completed where

appropriate. All further cor indicated unless corrected t maintenance fee notification	below or directed otherwise i	atent, advance ord in Block 1, by (a)	ers and notification specifying a new control	of maintenance fee orrespondence addre	s will be mailed to the current ess; and/or (b) indicating a sepa	correspondence address as rate "FEE ADDRESS" for	
CURRENT CORRESPONDENC	E ADDRESS (Note: Legibly mark-up	with any corrections or u	ise Block 1)	Fee(s) Transmittal.	of mailing can only be used for This certificate cannot be used for onal paper, such as an assignment cate of mailing or transmission.	or any other accompanying	
MCGINN & GIB 8321 OLD COURT	B, PLLC				Certificate of Mailing or Trans It this Fee(s) Transmittal is being the with sufficient postage for fire Mail Stop ISSUE FEE address	mission	
SUITE 200 VIENNA, VA 221	82-3817			transmitted to the U	JSPTO, on the date indicated belo	ow.	
						(Depositor's name)	
				<u> </u>		(Signature)	
				<u>L </u>		(Date)	
APPLICATION NO.	FILING DATE	F	IRST NAMED INVEN	TOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/522,609	03/10/2000		Shoichi Kuroha		64317/99	4319	
APPLN. TYPE	SMALL ENTITY	ISSUE FE	E P	JBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE	
nonprovisional	NO	\$1330		\$0	\$1330	05/11/2004	
<u>-</u>			<del>-</del> 1 c		_		
EXAMINER WANG, GEORGE Y		ART UNI	r Ci	LASS-SUBCLASS			
		2871		349-155000			
1. Change of correspondence CFR 1.363).	e address or indication of "Fe	e Address" (37		the patent front pa			
Address form PTO/SB/12	•		agents OR, altern firm (having as a	atively, (2) the namember a register ares of up to 2 register	ne of a single ed attorney or 2		
☐ "Fee Address" indicati PTO/SB/47; Rev 03-02 ( Number is required.	on (or "Fee Address" Indicati or more recent) attached. Use	on form of a Customer		ts. If no name is li			
	RESIDENCE DATA TO BE						
PLEASE NOTE: Unless been previously submitte (A) NAME OF ASSIGN	d to the USPTO or is being su	ibmitted under sep	ta will appear on the arate cover. Comple RESIDENCE: (CIT	tion of this form is N	of assignee data is only appropriation of a substitute for filing an assiction of the country)	te when an assignment has gnment.	
Please check the appropriate	assignee category or categor	ies (will not be prir	nted on the patent);	☐ individual	☐ corporation or other private gr	oup entity 🚨 governmen	
4a. The following fee(s) are			Payment of Fee(s):				
☐ Issue Fee			A check in the am	• • • • • • • • • • • • • • • • • • • •			
☐ Publication Fee			<ul> <li>□ Payment by credit card. Form PTO-2038 is attached.</li> <li>□ The Director is hereby authorized by charge the required fee(s), or credit any overpayment.</li> </ul>				
Advance Order - # of	Copies		Deposit Account Nu	mber	(enclose an extra c	opy of this form).	
Director for Patents is reque	sted to apply the Issue Fee an	d Publication Fee (	(if any) or to re-apply	any previously pai	id issue fee to the application ide	ntified above.	
(Authorized Signature)		(Date)					
NOTE; The Issue Fee and other than the applicant; interest as shown by the re	d Publication Fee (if require a registered attorney or age cords of the United States Pat	d) will not be acc nt; or the assigne ent and Trademark	epted from anyone e or other party in Office.				
obtain or retain a benefit application. Confidentiality estimated to take 12 minu completed application for case. Any comments on suggestions for reducing the Patent and Trademark (22313-1450. DO NOT Section 22313-1450.	tion is required by 37 CFR by the public which is to fill y is governed by 35 U.S.C. 12 tes to complete, including gam to the USPTO. Time will the amount of time you rehis burden, should be sent to Office, U.S. Department of END FEES OR COMPLET for Patents, Alexandria, Virg	e (and by the USI 22 and 37 CFR 1.14 thering, preparing, vary depending to equire to complete to the Chief Inform of Commerce, Al FED FORMS TO	TO to process) an 4. This collection is and submitting the		•		

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



#### United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILIT	NG DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/522,609	03/	/10/2000	Shoichi Kuroha	64317/99	4319
21254	7590	02/11/2004		EXAM	INER
MCGINN & C	•			WANG, G	EORGE Y
8321 OLD COU SUITE 200	JRTHOUSE	ROAD		ART UNIT	PAPER NUMBER
VIENNA, VA 2	2182-3817			2871	
				DATE MAILED: 02/11/200	4

# Determination of Patent Term Extension under 35 U.S.C. 154 (b)

(application filed after June 7, 1995 but prior to May 29, 2000)

The Patent Term Extension is 0 day(s). Any patent to issue from the above-identified application will include an indication of the 0 day extension on the front page.

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Extension is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) system (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (703) 305-1383. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.

	Application No.	Applicant(s)	- XIL
	09/522,609	KUROHA, SHOICHI	
Notice of Allowability	Examiner	Art Unit	
	George Y. Wang	2871	
The MAILING DATE of this communication app All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85 NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT I of the Office or upon petition by the applicant. See 37 CFR 1.31	S (OR REMAINS) CLOSED in b) or other appropriate communication is second in the secon	n this application. If not included unication will be mailed in due co	urse. <b>THIS</b>
<ol> <li>This communication is responsive to <u>Telephone interview</u></li> <li>The allowed claim(s) is/are <u>2 and 8</u>.</li> <li>The drawings filed on <u>10 March 2000</u> are accepted by the</li> <li>Acknowledgment is made of a claim for foreign priority and and all becomes of the priority documents have a complete the pr</li></ol>	e Examiner.  under 35 U.S.C. § 119(a)-(d) of the process of the pr	or (f). on No d in this national stage application a provisional application) since a ta Sheet. 37 CFR 1.78.	
6. Acknowledgment is made of a claim for domestic priority in the first sentence of the specification or in an Application	under 35 U.S.C. §§ 120 and/o		was included
Applicant has THREE MONTHS FROM THE "MAILING DATE" of below. Failure to timely comply will result in ABANDONMENT or			
<ol> <li>A SUBSTITUTE OATH OR DECLARATION must be subi INFORMAL PATENT APPLICATION (PTO-152) which given</li> </ol>			TICE OF
<ul> <li>8.  CORRECTED DRAWINGS (as "replacement sheets") mutering (a) including changes required by the Notice of Draftsper 1) hereto or 2) to Paper No</li> <li>(b) including changes required by the proposed drawing (c) including changes required by the attached Examined Identifying indicia such as the application number (see 37 CFR each sheet. Replacement sheet(s) should be labeled as such in</li> </ul>	rson's Patent Drawing Review correction filed, which shall be written on the control of th	h has been approved by the Examer in the Office action of Paper No.  The drawings in the front (not the ba	·
9. DEPOSIT OF and/or INFORMATION about the departached Examiner's comment regarding REQUIREMENT FOR			e the
Attachment(s)			
<ul> <li>1 Notice of References Cited (PTO-892)</li> <li>2 Notice of Draftperson's Patent Drawing Review (PTO-948)</li> <li>3 Information Disclosure Statements (PTO-1449 or PTO/SB/0 Paper No.</li> </ul>	6☐ Interview Sui 8), 7☐ Examiner's A	ormal Patent Application (PTO-15 mmary (PTO-413), Paper No Amendment/Comment Statement of Reasons for Allowan	<u>.</u> .

Application/Control Number: 09/522,609

Art Unit: 2871

jì

## **DETAILED ACTION**

## Allowable Subject Matter

1. Claims 2 and 8 are allowed.

The following is an examiner's statement of reasons for allowance:

As to claim 2, the prior arts of record do not anticipate or render obvious to one skilled in the art the claimed liquid crystal display device wherein the projection is formed in a format of creating wall around a transparent region so that the at least one spacer provided on the common electrode cannot enter the transparent region.

As to claim 8, the prior arts of record do not anticipate or render obvious to one skilled in the art the claimed liquid crystal display device wherein one of the at least one projection formed on the inner-most surface of the first substrate faces another one of the at least one projection formed on the inner-most surface of the second substrate.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to George Y. Wang whose telephone number is 571-272-2304. The examiner can normally be reached on M-F, 8 am - 4:30 pm.

Application/Control Number: 09/522,609 Page 3

Art Unit: 2871

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert H. Kim can be reached on 571-272-2293. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-1562.

gw January 26, 2004 ROBJERT H. KIM SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 2800